

**CLAIMS**

1. Use of a nucleic acid capable of expressing beta-interferon for the preparation of a pharmaceutical composition for the treatment of an immune disease.
2. The use of claim 1, wherein said immune disease is a demyelinating disease.
3. The use of claim 1 or 2, wherein said immune disease is an autoimmune disease.
4. The use of claim 3, wherein said autoimmune disease is multiple sclerosis.
5. The use of anyone of claims 1 to 4, wherein the nucleic acid is DNA.
6. The use of claim 5, wherein the DNA is naked DNA.
7. The use of claim 5, wherein the DNA is associated with a transfection-facilitating vehicle.
8. The use of claim 7, wherein said transfection-facilitating vehicle is selected from the group consisting of viral particles, cationic lipids, cationic polymers and polypeptides.
9. The use of anyone of claims 1 to 8, wherein said beta-interferon is human beta-interferon.
10. The use of anyone of claims 1 to 9, wherein said beta-interferon comprises a secretory signal sequence.
11. The use of anyone of claims 11 to 14, wherein said pharmaceutical composition administration is suitable for administration by injection.